



US009606692B2

(12) **United States Patent**
Chang et al.

(10) **Patent No.:** **US 9,606,692 B2**
(45) **Date of Patent:** **Mar. 28, 2017**

(54) **CONTROLLER FOR POSITION DETECTION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/015,715**

(22) Filed: **Feb. 4, 2016**

(65) **Prior Publication Data**

US 2016/0170534 A1 Jun. 16, 2016

Related U.S. Application Data

(63) Continuation of application No. 14/607,809, filed on Jan. 28, 2015, now Pat. No. 9,285,940, which is a continuation of application No. 14/033,872, filed on Sep. 23, 2013, now Pat. No. 8,970,552, which is a continuation of application No. 12/923,808, filed on Oct. 8, 2010, now Pat. No. 8,570,289.

(60) Provisional application No. 61/298,252, filed on Jan. 26, 2010, provisional application No. 61/298,243, filed on Jan. 26, 2010, provisional application No. 61/250,051, filed on Oct. 9, 2009.

(51) **Int. Cl.**

G06F 3/041 (2006.01)
G06F 3/044 (2006.01)
G01R 27/26 (2006.01)
G06F 3/047 (2006.01)

(52) **U.S. Cl.**

CPC **G06F 3/044** (2013.01); **G01R 27/2605** (2013.01); **G06F 3/041** (2013.01); **G06F 3/0412** (2013.01); **G06F 3/0416** (2013.01); **G06F 3/0418** (2013.01); **G06F 3/047** (2013.01); **G06F 2203/04102** (2013.01); **G06F 2203/04103** (2013.01); **G06F 2203/04104** (2013.01); **G06F 2203/04111** (2013.01)

(58) **Field of Classification Search**

CPC **G06F 3/041**; **G06F 3/044**
See application file for complete search history.

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(57) **ABSTRACT**

A controller for position detection is disclosed. At least one first 1-D position corresponding to at least one external object is determined based on signals of a plurality of first sensors by self-capacitance detection. Then, at least one second 1-D position corresponding to the at least one first 1-D position is determined based on signals of a plurality of second sensors by mutual-capacitance detection.

12 Claims, 21 Drawing Sheets

